

# AQT-66 GENERATING SET

(TECHNICAL DATA SHEET)

### **Standard Specifications:**

### 1- Prime Rating:

Unlimited hours usage, with an average load factor of 80% over each 24 hour period. 10% overload is available for 1 hour in every 12 hours operation. 0 overload is permitted on standby power.

#### 2- Standby Rating:

Limited to 500 hours annual usage, with an average load factor of 80% of the published standby power rating over each 24 hour period. Up to 300 hours of annual usage may be run continuously. No overload is permitted on standby power.

### 3- Engine:

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mecc alte

Perkins, including air filters, fuel filters, oil filter, starting motor and charging alternator etc.

4- Alternator Type: brushless AC alternator

5- Radiator:50°C, fan protective shroud

### Powered By: Perkins: Diesel Generator LEROY-SOMER

## STAMFURD power generation



### "We deliver power, service and solutions in exactly the way you want."

### **Output Rating:**

PRIME:		STANDBY:			
50 Hz—1500 R	pm 400 V, 3ph				
60 kVA	48 kW	66 kVA	53 kW		
60 Hz-1800 R	pm 480 V, 3ph				
68.1 kVA	54.5 kW	75.1 kVA	60.1 kW		
ENGINE SPEC	FICATIONS				
Engine Make		PERKINS			
Engine Model		1103A -33T	1103A -33TG2		
No. of Cylinders		3 vertical in	3 vertical in-line		
Cycle		4 Stroke	4 Stroke		
Aspiration		Turbocharg	Turbocharged		
Cooling Method		Water coole	Water cooled		
Governing Type		Mechanical	Mechanical		
Governing Class		G2 - ISO 852	28 Part 1		
Compression Ratio		17.25:1			
Displacement		3.3 L			
Bore/Stroke		105 x 127 m	105 x 127 mm		
Dynamic Charging Alternator		65AMP, 12\	65AMP, 12V		
ALTERNATOR	SPECIFICATIONS				
Alternator Make		Leroy Somer	Leroy Somer   STAMFORD -		
Alternator Model		TAL-042-H	TAL-042-H   UC224G		
Number of Poles		4	4		
Number of Winding	g Leads				
Type of Bearing		Single Bearir	Single Bearing		
Insulation Class - Temp Rise		Cont. H - 125	Cont. H - 125/40 <sup>°</sup> C		
Ingress Protection Rating		IP 23	IP 23		
Excitation System		Self Excited	Self Excited		
AVR Model		R120	R120		

### ISO 3046, BS 5514, DIN 6271, NEMA-MGI, DIN EN, BS 5000, IEC 60034, IEC 60947-2

Alternator Operating data			
Over speed	2250 rpm		
Voltage Regulation	<u>+</u> 1%		
Harmonic Coefficient THF	< 2%		
Tel. influence TIF	< 50		
Cooling air flow	0.10 m3/ Sec		

### **Standard Specifications:**

### 6- Fuel Tank:

Capacity of fuel tank is for 8-10 hours running Built in fuel tank up to 800 kVA

### 7- Circuit Breaker:

3 pole LS MCCB

### 8- Control system alarms:

- Over and Under Speed
- Low and High Battery Volt.
- Start and Stop Failure
- Over Current
- Under / Over Generator Voltage
- Low Oil Pressure
- Emergency stop
- High engine temperature

### 9- Warranty policy:

- AQT GENERATOR products has a warranty for 12 Months or 1000 hours whichever occurs first against any manufacturing defects
- Wearing parts (filters), incorrect man made operation, maintenance failures are excluded from the warranty policy

### Acoustic Enclosure Specifications:

Enclosure Type	Acoustic & Weather Proof		
Drainage Provision	Fuel and Water Drainage		
Transportation	Tested Single Point Lifting Facility & Forklift Pockets		
Ingress Protection Rating	,		
Lifting	ISO Standard Lifting		
Canopy RAL Color	TAL 9010		
Base frame RAL Color	RAL 9011		
Noise Pressure level @ 7m 66db(A) @ 7mt			

### **Control System:**

- Large back-lit text display Multiple display languages
- DSENET expansion compatible
- Data logging facility
- Fully configurable via PC using USB communication
- Front panel configuration
- Efficient power save mode
- 3 phase generator sensing

Accumulated power monitoring (kWh, kVA h, kVA r h)  $\ensuremath{\mathsf{kVAr}}$ 



Generator/load current monitoring and protection (kW)

- Breaker contol via fascia buttons
- Fuel and start outputs, configurable using can
- 4 configurable DC outputs
- 4 configurable analogue/digital inputs

Automatically transfers between mains (utility) and generator

QT GENERATOR

Increased input and output expansion capability via dsenet IP65 rating (with optional gasket) offer

IP65 rating (with optional gasket) offers increased resistance to water ingress

Digital inputs; Analogue Inputs

### DSE4520 MKII

AUTO START & AUTO MAINS FAILURE CONTROL

### **Dimensions:**

Туре	Length (mm)	Width (mm)	Height (mm)	Fuel Tank (L)	Weight (KG)
OPEN	1950	775	1175	135	900
CLOSED	2260	1100	1500	135	1450



### Engine:



Perkins heavy duty high performance industrial type diesel engine.

COOLING SYSTEM				
Total Coolant Capacity (L) 10.2 L				
Cooling Fan Air Flow 89 m3/ min				
Radiator Fan Load 0.5 Kw				
Heat Radiation to Room (PRP) 10 kW				
Heat Radiation to Room (ESP)	11 kW			
LUBRICATION SYSTEM				
Oil Filter Type	Spin-On Full Flow			
Total Oil Capacity	8.3L			
Oil Type	API-CH-4 or ACEA E5			
EXHAUST SYSTEM				
Muffler Type	Industrial Grade			
Max. Back Pressure	10 kPa			
Exhaust Gas Flow (PRP/ESP)	10.1/10.4 m3/ min			
Exhaust Gas Temperature	< 5710C			
FUEL SYSTEM				
Recommended Fuel	Class A2 Diesel			
Fuel Consumption Standby	15.90 L/hr			
Fuel Consumption 100% PRP	14.0 L/hr			
Fuel Consumption 75% PRP	10.80 L/hr			
Fuel Consumption 50% PRP	7.5 L/hr			
AIR SYSTEM				
Air Filter Type	Dry Element			
Combustion Air Flow (PRP)	3.8 m3/min			
Combustion Air Flow (ESP)	3.9 m3/min			
Max Air Filter Intake Restriction	8kPA			

### **Optional configurations:**

### Engine accessories:

- Heavy-duty air filter
- Coolant heater
- Lubricant oil heater
- Fuel and Water Separator
- Lube oil rotary pump

#### **Alternator And Accessories:**

- Leroy somer/stamford
- Anti condensation heater
- $\square$  PMG + AVR  $\bigcirc$  Double bearing
- Alternator High voltage \_\_\_\_\_kV
- RTDs for Bearing and winding

#### **Cooling System:**

- 55 degree Radiator
- Remote Radiator

#### **Control System:**

- AMF
- Parallel
- Practical type in low temperature environment
- Control Screen Heater
- Remote Annunciators
- Other (ComP, DEIF)

#### **Circuit Breaker:**

- □ 3/4 poles
- Fixed/handcart type
- Electric mechanism

#### Automatic Transfer Switch (ATS):

- ATS cabinet
- Contractor type ATS
- Motorized changeover type ATS

#### **Start Battery:**

- □ Nickel-cadmium battery
- Maintenance-free battery
- Battery charger and selector switch
- Charging current meter

#### **External Fuel Tank:**

- Single /double wall fuel tank (500-5000 L)
- Fuel Transfer pump

#### **Exhaust Muffler:**

- Residential grade
- Critical grade
- Hospital grade

#### Available for voltages :

- - 400/230V, 480/277V, 380/220V, 440/254V, 416/240V, 220/127V, 208/120V

QT GENERATOR

### **Our Success**

We owe our success to our hardworking, highly skilled and committed employees. Our core focus lies in providing customized integrated products and services with well-established infrastructure, equipment and manpower to support and provide the turn key solutions for various industries. We provide the latest in power generator technology equipment, allowing us to give our customers the best product and the best possible service.

### Objectives

Our objective is to serve customers to the utmost by providing them with the best-in-class electric generators, reliable door to door delivery, and after sales service at competitive market prices.

"We continue to build our solid reputation for excellence and response, while delivering reliable and tailored solutions to meet the customer's requirements".



At AQT Generators, we take pride in being a dynamic force in the realm of diesel generator sets, offering an extensive range of international brands renowned for their reliability and performance. Our commitment to excellence is reflected in our partnerships with world-famous engine manufacturers such as Perkins and Cummins, coupled with top-notch alternators from Stamford and Leroy Somer.





### **CONTACT US**

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